

## *Hesperarion mariae* (Gastropoda:Arionidae:Arionimacinae), a New Slug Species from Oregon<sup>1</sup>

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### ABSTRACT

A new species of arionid slug, *Hesperarion mariae*, is described from northern, coastal Oregon, representing the first report for the genus in the state. The new species is judged to be most closely related to *Hesperarion hemphilli*.

### INTRODUCTION

Until this report, members of the slug genus *Hesperarion* were thought to be restricted in distribution to California around and south of San Francisco (1, 2, 3, 4). Two species have been described previously, *H. niger* (J. G. Cooper 1872) and *H. hemphilli* (W. G. Binney 1875). Thus, the discovery of the genus in northern coastal Oregon not only represents a significant range extension of several hundred miles, but it also provided material for the description of a striking new species.

*Hesperarion mariae* Branson, spec. nov.

Figures 1, 2

The head, tentacles and face are off-white, but the top of the head is pale reddish-tan in life. The head is rather long and not retractable beneath the mantle. The top of the head and sides of the neck are coarsely sculptured by deep grooves. The tentacles are thick-set and muscular in appearance. The smooth, reddish-tan mantle is approximately  $\frac{2}{3}$  longer than wide, being widest in the posterior half. The mantle is marked with large, roundish black spots and irregular blotches that are not arranged in a pattern. A large, non-spiral internal shell occupies the widest portion of the mantle, its outline being clearly visible externally. The slit-like pneumostome is definitely behind the middle of the mantle on the right side. The body behind the mantle, pale reddish-tan above, grading to yellowish-white on the sides, is raised in a hump beneath the mantle. Nu-

merous black and grayish blotches and spots are arranged longitudinally on the back and upper sides, following the coarse longitudinal grooves. On the lower sides, the spots lose their patterned appearance, and the grooves become diagonal, almost vertical below the mantle. The foot margin is yellowish-white, narrow, and divided by numerous coarse vertical grooves. The longitudinal pedal grooves meet in a very large and open pit at the posterior end, the ventral portion of which is bent downward (Fig. 2). The very indistinctly tripartite sole is milky white and unmarked by pigmentation in life. The jaw is reddish-brown and bears coarse rib-like striations. The penis is somewhat swollen and constricted near the base. The large verge fills most of the penis, being somewhat triangular, widest above. The oviduct is much longer than the penis.

Measurements: only 2 specimens were collected during the summer of 1981 (22 June 1981), both being 20 mm long after preservation in 50% isopropyl alcohol. In the holotype, the foot measures 3.5 mm in greatest width, the mantle is 4.0 mm in greatest width and 7.0 mm in greatest length. The head, from the anteriormost tip to the anterior edge of the mantle, is 3.0 mm. The second specimen was sacrificed for dissection purposes.

Type locality: crest of Cape Lookout in a Sitka spruce forest, R 10 W, T 2 S, Tillamook County, Oregon. In decaying wood.

Holotype: Field Museum of Natural History, FMNH 198763.

Etymology: this beautiful little slug is named in honor of my constant companion, my wife, Mary Louise Branson.

Diagnosis: *Hesperarion mariae* is an arionid slug that differs from all other members of the

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FIG. 1. Dorsolateral view of *Hesperarion mariae*. Holotype. Scale line = 10.0 mm.

FIG. 2. Posterior end of *Hesperarion mariae* (holotype) showing pronounced deep pit and downward deflection of caudal region. Scale line = 2.5 mm.

genus by characteristics of the genitalia and features of the body sculpturing on the head and body, by the raised hump-like area beneath the mantle, and by color pattern. It is most closely related to *H. hemphilli* (W. G. Binney) but differs from that species in the decidedly reddish pigmentation, in having the black spots of the body arranged in definite rows, in having a larger caudal pit with a downturned ventral portion, and in possessing a massive triangular and constricted penis.

#### LITERATURE CITED

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